













# MInimizing CROssborder water contamination of microPLASTICS-MICROPLASTICS HUSRB/23R/12/089

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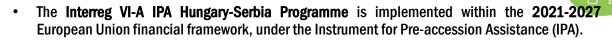




## **Project**

- Project ID: HUSRB/23R/12/089
- Project acronym: MICROPLASTICS
- Project title: Minimizing CROssborder water contamination of microPLASTICS
- Priority: A greener region
- Objective: Biodiversity and reduce pollution
- Budget of the project: 1,372,328.40 EUR
- Maximum EU contribution: 1,166,479.14 EUR
- Project starting data: 01.07.2024.
- Project end date: 30.06.2026.





- The Programme funds and supports co-operation projects of organizations located in the Programme-eligible area - Hungarian counties Csongrád-Csanád and Bács-Kiskun, and Serbian territories: West Bačka, North Bačka, South Bačka, North Banat, Central Banat, South Banat and Srem.
- The Programme helps the development of a stable and co-operating region and the overall quality of life in the border region; enables economic collaboration of organizations from the two countries, nurtures the common identity, and cultural and historical heritage of the border region; contributes to its environmental sustainability and safety.

Role	Official name of the organization (in original language)	Country	NUTS III region or equivalent	NUTS V - settlement(s)
LA	Institut za javno zdravlje Vojvodine	Serbia	Južnobački upravni okrug	Novi Sad
<b>A1</b>	Zavod za javno zdravlje Sombor	Serbia	Zapadnobački upravni okrug	Sombor
A2	Nemzeti Közszolgálati Egyetem University of Public Service	Hungary	Budapest	Budapest
А3	Fond "Evropski poslovi i razvoj" Autonomne pokrajine Vojvodine	Serbia	Južnobački upravni okrug	Novi Sad











## **Overall Objective**

- Project overall objective is to enhance environmental protection and reduce pollution by identifying sources and reducing microplastic pollution in the water ecosystem within the crossborder area Bačka/Bács-Kiskun.
- This is going to be achieved through sampling and identification of pollutants as well as modeling and developing measures and tools to reduce the microplastics pollution in the water ecosystem while at the same time increasing public awareness on the problem and solutions developed.

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## **Project Summary**

- The MICROPLASTICS project focuses on preserving nature in the cross border area by identifying the sources of pollution and reducing the level of the water ecosystem pollution by microplastics.
- Specific set of outcomes are:
- 1. Determining the extent and amount of microplastics pollution within the water ecosystems (river, canals and wastewater treatment facilities) and identifying the sources of pollution within the CBC region, including protected locations Gornje Podunavlje, Begečka jama, nature park Gemenc, Riha oxbow lake.
- 2. Establishing the regional system for measuring and monitoring of microplastics and developing the recommendations for increasing the efficiency of measures to protect nature and the environment.
- 3. **Designing the pilot action project and testing filtration solution for wastewater treatment facilities** and identifying the waste water treatment facilities in the region for potential replication of project outcomes in the future.
- 4. Engaging school children, public officials, experts and the general public in educational and awareness raising activities for reducing water and soil pollution and deterioration of natural habitats.

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## **Target groups**

- (1) Public health experts working within the partner organisation and within the sector (20 people),
- (2) Partner organizations participating in the project (4 organization),
- (3) School children participating in the educational activities (200 pupils),
- (4) **High school Students** participating in the educational activities (150 students),
- (5) Water management, public health, and local authorities representatives participating in the educational activities (20 people),
- (6) General population (200 people),
- (7) NGO active in nature preservation (4 NGO).













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#### Microplastics

Name of indicator	Unit	Target value	Sources of validation
Public events across borders jointly organised	event	2,00	Report on cross border conference and study tour
Pilot actions developed jointly and implemented in projects	pilot actions	1,00	Report on the implementation of the <b>pilot action</b> for two facilities together with mapped Wastewater plant treatment facilities
Organisations cooperating across borders	organizations	4,00	Six Minutes from Joint coordination meetings. Six Project reports. Joint Communication plan
Organisations cooperating across borders after project completion	organizations	4,00	Memorandum of understanding between partner organisations signed by all project partners.
Number of actions contributing to the elimination of pollution sources	action	1,00	Report - after the implementation of education on the <b>Programme platform</b> .  Developed protocols - electronic document
Number of educated persons on environmental and nature protection topics	person	300,0	Report from workshop in elementary schools Report from high school workshop Report from roundtable Developed ICT solution















Activity	Description of activity	
0.1 Project management	All partners	

0.2 Communication

All partners

All partners - opening conference, ecological promotion material, roll ups, visibility, closing conference, film, media, platform

## **Activities**

#### Opening conference, Novi Sad 17.10.2025.





**Members of DKMT Euroregion** Award for Excellence for CBC cooperation in 2024



#### Synergie:

- Microdrink project
- Conference "Microplastics for Breakfast," April 10, 2025, SUPERLAB Institute, Vrčin. https://www.microplasticsforbreakfast.com/
- Participation in joint newslater Microdrink activity
- Participation in Conference "Water 2025", Kopaonik, Serbia







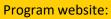






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### **Activities**



#### Microplastics











Activity	Description of activity
1.1 Education of Public Experts	1st education of public experts – Novi Sad, 18.10.2024. 2nd education of public experts – Sombor, 10.03.2025. 3rd education of public experts – Baja, 17.07.2025
1.2 Procurement of <b>equipment</b> for sampling and detecting	

#### Equipment for sampling:

- Pump method for water
- Manta net
- Grab sampler for sediment
- Boat

#### Equipment for analysing:

- FTIR spectroscopy
- Filters
- Evaporation systems
- Chemicals and consumables
- Basic laboratory equipment and dishes
- IT equipment

#### Equipment for pilot project:

Membrane vacuum filtration system with vacuum pump

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Water Workshop 2025









## Activities Activities Activities



#### **Microplastics**



Activity	Description of activity	
1.3 Sample collection	Water: 117 samples	

River sediment: 10 samples (HU)

Planned sample points open surface water (34 samples: 16HU/18SRB) - upstream and downstream to discharge wastewater: Baja, Mohacs, Bezdan, Sombor, Bačka Palanka, Novi Sad;

Canals (38 samples: 28HU/10SRB): Ferenc-Chanel, Baja Bezdan canal, Kígyós Canal System In nature parks (22 samples: 12HU/10SRB): nature park Gemenc, Riha oxbow lake, Gornje podunavlje,

Begečka jama

Wastewater (23 samples: 4HU/19SRB): Baja, Sombor (pilot project), Novi Sad

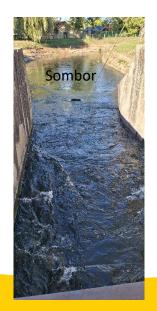
1.4 Validation of methods

Analyses and validation of methods are in progress.

1.5 Protocol development

In progress























## Activities Activities



#### **Microplastics**

Activity	Description of activity
2.1 Development of filtration method - Pilot	Researches from HU are developing filtration
2.2 Procurement of the equipment for filtration of microplastics	method for two partners – Baja and Sombor (two wastewater facilities in CBC region) – in progress
2.3 Testing of a developed solution	In progress
2.4 Mapping of existing wastewater facilities	In progress
3.1 Educational activities in elementary schools	In 6 schools (3 HU/3 SRB), 40 pupils/education - started in HU
3.2 Educational activities in high schools	In 6 schools (3 HU/3 SRB), 25 students/education
3.3 Education of water management, LSG, population, NGO	2 round tables (1 HU/1 SRB), 30 people/ education
3.4 Cross border conference, study tour	Conference - 18.09.2025., Novi Sad
3.5 Development of software solution	WEB platform – in progress



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#### • In the name of the entire Team of MICROPLASTICS Project

- Institut za javno zdravlje Vojvodine, SRB
- Zavod za javno zdravlje Sombor, SRB
- Nemzeti Kozszolgaloti Egyetem (University of Public Service), HU
- Fond "Evropski poslovi i razvoj" Autonomne pokrajine Vojvodine, SRB

## Thank you for attention!



